ABSTRACT

A NO_x storing catalyst (11) comprising a precious metal catalyst (46) and NO_x absorbent (47) is arranged in an exhaust passage. When the air-fuel ratio of the exhaust gas is lean, the storing catalyst cold stores the NO_2 contained in the exhaust in the absorbent when the catalyst is inactive and hot stores the cold stored NO_2 in the absorbent when the catalyst is made active. The NO_2 contained in the exhaust is cold stored in the absorbent when the catalyst is not activated, and when a predetermined NO_x storing catalyst restoring condition (107) is met, a NO_x storing catalyst restoring control (109, 115) including raising the NO_x storing catalyst temperature to a predetermined temperature to active it (109) is executed so as to restore the cold storing capability of the NO_x absorbent.